WHAT IS CLAIMED IS:

1.   A method of optimizing a query in a computer system, the query being performed by the computer system to retrieve data from a database stored on the computer system, the method comprising:

5   (a) combining join predicates from a query with local predicates from each branch of one or more UNION ALL views referenced by the query;

(b) analyzing the combined predicates; and

(c) not generating the join when the analysis step indicates that the combined predicates are always FALSE and the join generates an empty result.

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2.   The method of claim 1, wherein the query joins two or more of the UNION ALL views.

3.   The method of claim 1, wherein each UNION ALL view contains a UNION

15   ALL of one base table with a local predicate specifying a data range in the base table.

4.   The method of claim 1, wherein the join predicates are on columns of the UNION ALL views that correspond to the local predicates.

20   5.   The method of claim 1, wherein a select-list of the query does not contain aggregate functions, a DISTINCT modifier, or a GROUP BY clause.

6.   The method of claim 1, wherein a select-list of the query contains a DISTINCT modifier, but does not contain aggregate functions or a GROUP BY clause.

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7.   The method of claim 6, further comprising creating a new query block that includes a DISTINCT modifier with the select-list as a parent query block.

8.   The method of claim 1, wherein a select-list of the query contains one or more

30   aggregate functions and/or a GROUP BY clause.

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9.   The method of claim 8, further comprising creating a regrouping query block with a regouping select-list and the GROUP BY clause, and another select-list used for distribution.

10.   The method of claim 1, wherein pruning logic determines whether the combined predicates from the local predicates from the branches of the UNION ALL views and joins of referencing query are contradictory.

11.   The method of claim 10, wherein the combined predicates are contradictory if the predicates always evaluate to FALSE.

12.   The method of claim 11, wherein no join is generated if the combined predicates are contradictory.

13.   The method of claim 11, wherein the join is generated if the combined predicates are not contradictory.

14.   A computer-implemented apparatus for optimizing a query, comprising:
(a) a computer system;
(b) logic, performed by the computer system, for
        (1) combining join predicates from a query with local predicates from each branch of one or more UNION ALL views referenced by the query;
        (2) analyzing the combined predicates; and
        (3) not generating the join when the analysis step indicates that the combined predicates are always FALSE and the join generates an empty result.

15.   The apparatus of claim 14, wherein the query joins two or more of the UNION ALL views.

16. The apparatus of claim 14, wherein each UNION ALL view contains a UNION ALL of one base table with a local predicate specifying a data range in the base table.

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17. The apparatus of claim 14, wherein the join predicates are on columns of the UNION ALL views that correspond to the local predicates.

18. The apparatus of claim 14, wherein a select-list of the query does not contain aggregate functions, a DISTINCT modifier, or a GROUP BY clause.

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19. The apparatus of claim 14, wherein a select-list of the query contains a DISTINCT modifier, but does not contain aggregate functions or a GROUP BY clause.

20. The apparatus of claim 19, further comprising logic for creating a new query

15 block that includes a DISTINCT modifier with the select-list as a parent query block.

21. The apparatus of claim 14, wherein a select-list of the query contains one or more aggregate functions and/or a GROUP BY clause.

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22. The apparatus of claim 21, further comprising logic for creating a regrouping query block with a regouping select-list and the GROUP BY clause, and another select-list used for distribution.

23. The apparatus of claim 14, wherein pruning logic determines whether the

25 combined predicates from the local predicates from the branches of the UNION ALL views and joins of referencing query are contradictory.

24. The apparatus of claim 23, wherein the combined predicates are contradictory if the predicates always evaluate to FALSE.

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25.   The apparatus of claim 24, wherein no join is generated if the combined predicates are contradictory.

26.   The apparatus of claim 24, wherein the join is generated if the combined predicates are not contradictory.

27.   An article of manufacture embodying logic for performing a method for optimizing a query, the query being performed by a computer system to retrieve data from a database stored in a data storage device coupled to the computer system, the method comprising:

(a) combining join predicates from a query with local predicates from each branch of one or more UNION ALL views referenced by the query;

(b) analyzing the combined predicates; and

(c) not generating the join when the analysis step indicates that the combined predicates are always FALSE and the join generates an empty result.

28.   The article of claim 27, wherein the query joins two or more of the UNION ALL views.

29.   The article of claim 27, wherein each UNION ALL view contains a UNION ALL of one base table with a local predicate specifying a data range in the base table.

30.   The article of claim 27, wherein the join predicates are on columns of the UNION ALL views that correspond to the local predicates.

31.   The article of claim 27, wherein a select-list of the query does not contain aggregate functions, a DISTINCT modifier, or a GROUP BY clause.

32.   The article of claim 27, wherein a select-list of the query contains a DISTINCT modifier, but does not contain aggregate functions or a GROUP BY clause.

33.   The article of claim 32, further comprising creating a new query block that includes a DISTINCT modifier with the select-list as a parent query block.

34.   The article of claim 27, wherein a select-list of the query contains one or more aggregate functions and/or a GROUP BY clause.

35.   The article of claim 34, further comprising creating a regrouping query block with a regouping select-list and the GROUP BY clause, and another select-list used for distribution.

36.   The article of claim 27, wherein pruning logic determines whether the combined predicates from the local predicates from the branches of the UNION ALL views and joins of referencing query are contradictory.

37.   The article of claim 36, wherein the combined predicates are contradictory if the predicates always evaluate to FALSE.

38.   The article of claim 37, wherein no join is generated if the combined predicates are contradictory.

39.   The article of claim 39, wherein the join is generated if the combined predicates are not contradictory.